

CLAIMS

What is claimed is:

1. A method of maintaining communication of data in
5 a communication link between a transmission site and a
reception site during a momentary disruption of the
communication link, the method comprising steps of:

storing data in a memory at the transmission site
during an interval of time that includes said
10 disruption;

transmitting said data as a set of data bits from
said memory along said communication link at a point
in time subsequent to said disruption; and

combining said set of data bits at the reception
15 site with a previously communicated sequence of data
bits to provide continuity of the communication of
the data.

2. A method according to claim 1, wherein said
combining step includes a decoding of an error correction
20 code present in said sequence of data bits.

3. A method according to claim 1, wherein said
storing step stores a first sequence of data occurring
over an interval of time longer than and including said
disruption, and wherein said data is read out of said

memory in a second sequence that is a scrambled version of said first sequence prior to send transmitting step.

4. A method according to claim 3, wherein said combining step includes a descrambling of said previously
5 communicated sequence.

5. A method according to claim 4, wherein said combining step includes a decoding of an error correction code present in said sequence of data bits, said decoding step taking place after said descrambling step.

10 6. A method according to claim 4, wherein said first sequence of data is read into said memory by rows in a tabulation format of rows and columns, and is read out of said memory in columns to accomplish said descrambling, and wherein in said storing step, said
15 interval of time is longer than said disruption by at least a factor of 10.

7. A method according to claim 1, wherein, in said storing step, said interval of time is equal to the length of said disruption, and data stored in said
20 storing step is transmitted to said reception site after said disruption, said reception site including a buffer for received data, and wherein data from said combining step is outputted to a user prior to and during said disruption.

8. A method according to claim 7 wherein a clock rate for received data at the reception site is increased momentarily for receiving data in said buffer at said reception site to fill said buffer with data in preparation for a disruption.

9. A method according to claim 1, wherein, in said storing step, said interval of time is equal to the length of said disruption, and data stored in said storing step is transmitted to said reception site after said disruption, said reception site including a buffer for received data, and wherein there is a step of filling said buffer with received data prior to the occurrence of said disruption, and said combining step includes a step of reading out data from said buffer during said disruption to provide for a continuous flow of data to a user at said reception site.

10. A method according to claim 9 wherein a clock rate for receiving data at the reception site from the transmission site is increased momentarily for filling the buffer with data prior to the occurrence of said disruption.

11. A method according to claim 10 wherein, during said momentary increase of clock rate, there is a reduction in the amount of data stored in said memory at said transmission site, thereby to empty said memory in preparation for a storing of data therein during a subsequent disruption.

12. A system for maintaining communication of data in a communication link between a transmission site and a reception site during a momentary disruption of the communication link, the system comprising:

5 a memory at the transmission site serving for the storage of data during an interval of time that includes said disruption;

 a transmitter for transmitting said data as a set of data bits from said memory along said communication
10 link at a point in time subsequent to said disruption; and

 circuitry for combining said set of data bits at the reception site with a previously communicated sequence of data bits to provide continuity of the
15 communication of the data.

13. A system according to claim 12, further comprising a decoder providing a decoding of an error correction code present at the output of said combining circuitry in said sequence of data bits.

20 14. A system according to claim 12, wherein said memory stores a first sequence of data occurring over an interval of time longer than and including said disruption, and wherein said data is read out of said memory in a second sequence that is a scrambled version
25 of said first sequence prior to transmission to said reception site.

15. A system according to claim 14, wherein said memory is part of an interleaver at said transmission site for scrambling said first sequence, and the system further comprises a de-interleaver following said combining circuitry at said reception site for descrambling of a previously communicated sequence.

16. A system according to claim 15, further comprising a decoder at said reception site for a decoding of an error correction code present in said sequence of data bits, said decoding step taking place after said descrambling.

17. A system according to claim 15, wherein said first sequence of data is read into said interleaver by rows in a tabulation format of rows and columns, and is read out of said interleaver in columns to accomplish said descrambling, and wherein said interval of time is longer than said disruption by at least a factor of 10.

18. A system according to claim 12, wherein said interval of time is equal to the length of said disruption, and data stored in said memory is transmitted to said reception site after said disruption, said reception site including a buffer for received data, and wherein data communicated along said link is outputted to a user prior to and during said disruption and during said subsequent disruption.

19. A system according to claim 18 wherein a clock rate for received data at the reception site is increased momentarily for receiving data in said buffer at said reception site to fill said buffer with data in preparation for a disruption.

20. A system according to claim 12, wherein said interval of time is equal to the length of said disruption, and data stored in said memory is transmitted to said reception site after said disruption, said reception site including a buffer for received data, and wherein there is a filling of said buffer with received data prior to the occurrence of said disruption, and there is a reading out of data from said buffer during said disruption to provide for a continuous flow of data to a user at said reception site.

21. A system according to claim 20 wherein a clock rate for receiving data at the reception site from the transmission site is increased momentarily for filling the buffer with data prior to the occurrence of said disruption.

22. A system according to claim 21 wherein, during said momentary increase of clock rate, there is a reduction in the amount of data stored in said memory at said transmission site, thereby to empty said memory in preparation for a storing of data therein during a subsequent disruption.